

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

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*Typical
Child Care and Parenthood Education
in Home Economics Departments*

By

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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., June 7, 1927.

SIR: The growth of child care and parenthood education from the elementary school through the college and university has been so rapid in home-economics departments of recent years that it seems appropriate briefly to set forth the progress made in this comparatively new field of education. Emeline S. Whitcomb, specialist in home economics, has, at my request, surveyed child care and parenthood education as it occurs in these fields of educational endeavor and reports her findings in the accompanying manuscript. I recommend that it be published under the title "Typical Child Care and Parenthood Education in Home Economics Departments."

Respectfully submitted.

JNO. J. TIGERT, *Commissioner.*

The SECRETARY OF THE INTERIOR.

Typical Child Care and Parenthood Education in Home Economics Departments

Preface

The purpose of this bulletin on child care and parenthood education is to show the present trends of preparental education as reported by the home economics departments of the various elementary and secondary schools and institutions of higher education located in different sections of the United States.

The Bureau of Education assumes no responsibility for the philosophies advanced, time allotted, courses outlined, and laboratory facilities described for the child development and parental education as stated in this bulletin. The policies and practices described are those reported by the schools and institutions herein named. The selected material on this subject is described as adequately as space would permit.

The bulletin is arranged in five chapters. Each chapter is prefaced by a brief introduction explaining the basis for including the specific examples cited therein. These examples were selected from a mass of material sent to the Bureau of Education at the request of the United States Commissioner of Education, who addressed circular letters concerning this matter to 48 State departments of public instruction and the District of Columbia, to 1,100 public schools, and to 600 public and private institutions of higher education.

Replies were received from 40 State superintendents. All except two stated that they have made no official requirements or recommendations relative to child care and parenthood education; that practically all of the child-health bureaus of the respective State health departments published for circulation valuable information regarding child hygiene; and that their teacher-training institutions and many high schools offered child-welfare training in their departments of home economics.

Responses from public schools and institutions of higher education were numerous. But lack of space prohibits the inclusion in this bulletin of all the material received except that which is representa-

tive of typical practices of child development and parental education as found in the various sections of the United States.

The purpose of including these practices in this bulletin is to orient home-economics teachers in service or otherwise and all other persons who desire to know what home-economics departments throughout the country offer in child care and parental education.

In arranging the contents of this bulletin examples of preschool education are given for public schools and institutions which do and do not maintain nursery schools and which have and have not access to nursery school facilities.

Overlapping of subject matter so far as possible is omitted. However, the results of an inquiry extending from the elementary school through college may suggest repetition, especially when examples of child care and parenthood education are given as found in the elementary, junior, and senior high schools, in colleges, and in universities.

Under section E of Chapter I is found an outline of the child-hygiene lessons given in Wisconsin. So far as is known, Wisconsin is the only State where the bureau of child welfare of the health department, in cooperation with the department of public instruction and vocational education, has developed a course in infant hygiene and introduced it into the schools of the State as a part of the State course of study. For further information concerning this course, see Chapter I of this bulletin.

In the appendix of this bulletin are found the summaries of two discussions resulting from a conference on child training and children in home-management houses held in Minneapolis, Minn., June 25 and 26, 1926, under the auspices of the Institute of Child Welfare and the home-economics division of the University of Minnesota.

CHAPTER I

Child Care and Training in Elementary, Junior, and Senior High Schools

The child care and training material selected for this chapter is based upon (a) the type offered and laboratory facilities provided in grammar schools above the sixth grade; (b) the policies advocated in progressive junior high school systems in various sections of the United States; (c) the methods used, as found in Vermont, to stimulate the interest of junior and senior high school girls in the subject; and (d) a state-wide program for all elementary, junior, and senior high schools as advocated by Wisconsin's bureau of child welfare of the State board of health, in cooperation with the department of public instruction, State board for vocational education, and State board of normal regents. This program was outlined by the State organizer of school courses in infant hygiene. Her duties are to develop the infant-hygiene course in the various school systems and to demonstrate, advise, and teach this subject as the need arises.

A. In the Elementary Schools of Faribault, Minn., and Holland, Mich.

Faribault, Minn., gives all seventh-grade girls a unit of 18 weeks in child care and training. The text used for this grade is prepared by the Minnesota State Board of Health and emphasizes these subjects: Personal hygiene, health habits, and hygienic diet of the child from infancy to school age; development of the child through infancy and adolescence; amusements; habits and character training; the care and construction of children's clothing; the family's contribution to the welfare of the child; opportunities afforded in the community and State for social welfare work concerning young children.

Holland, Mich., offers a 10 weeks' course in homecrafts to all girls of the eighth grade. An investigation in that city showed that 50 per cent of the girls in this grade "spent part of their out-of-school time caring for babies."

The child care and training course offered to the girls of this grade has the indorsement of Holland's baby clinic and covers the following topics: Reasons for birth registration; type and condition of the house most suitable for the baby; hygienic care of the baby; the baby's best food; cow's milk and its care in the home; the use of water for the baby internally and externally; weight and

development of the body; choice and care of the baby's clothing; baby's food for the second year; food for children between 2 and 5 years of age.

B. In the Day Nurseries of the Elementary Schools of Los Angeles, Calif.

Los Angeles, Calif., supports 16 or more day nurseries which are under the jurisdiction of the city's board of education and are supervised by its department of home economics. For cooperative pur-



HEALTH IN SUNSHINE AND SAND
Nursery in Elementary Schools, Los Angeles, Calif.

poses the day nurseries are located near schools which have kindergartens.

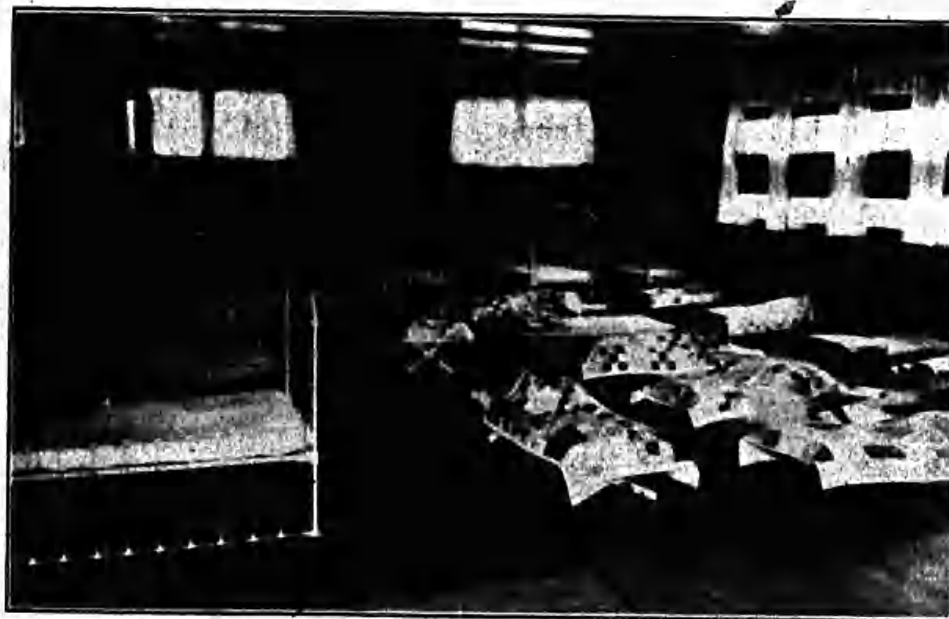
To the day nurseries are brought children of nine months up to kindergarten age, whose mothers are employed outside of their homes. On the whole, the nurseries are open from 8.30 a. m. to 4.30 p. m., but in a few districts, to cooperate with the wage earner's schedule, children may be brought as early as 7 o'clock in the morning and remain until 6.40 in the afternoon.

Each day nursery is in charge of a competent English-speaking woman who is well trained in the physical and mental care of children, and who is assisted in the care of the children by the elementary and junior-high school girls in the home economics classes of the various schools.

These girls prepare the food, set the table, and assist the children with their daily meals. They make and launder the children's clothing, keep the nursery clean and comfortable, and amuse the children with stories and games. This supervised contact with young children affords girls of elementary and junior high school years unusual opportunities for insights into the nature of child life and gives them experience in the right care of the young at a time when, in their own homes, they are caring for young children.

C. In the Junior-High Schools of New York, Philadelphia, Cleveland, Duluth, and Denver

New York City.—All junior high schools with model home-making apartments use, for demonstration purposes in their child care



REST NEEDED FOR GROWTH
Nursery in Elementary Schools, Los Angeles, Calif.

and training courses, a large hospital doll or real child. In the junior high schools without home-making equipment the child care and training work consists of weighing and measuring younger children in the grades and teaching them health habits by means of pictures and charts. The junior high school girls' experiences in the care of young children outside of the school are used in the classroom for the purpose of not only stimulating class interest in this subject among the girls but also to give to the class information as to how young girls may care for the preschool child.

Philadelphia, Pa.—The Philadelphia junior high schools give to the girls in the seventh and eighth grades, respectively, the following number of lessons in child care and training: *In the seventh grade*—four lessons on the care of the baby, including the comparison of

the little baby with the tender developing plant or young tree; the handling, holding, carrying, lifting, and the helping of baby over obstacles; health and growth; the weighing of baby; observations regarding the baby's ability to hold up its head, sit, stand, and walk; care of baby's bed; his habits; his need of warmth and sunshine; bathing; dressing; care of the mouth, ears, eyes, and nose. *In the eighth grade*—three lessons on the care of the baby, including a study of the baby's clothing; care of diaper; proper habits; natural and artificial feeding; care and modification of cow's milk; care of feeding utensils; management of the crying, nervous, teething child; objections to pacifiers and patent medicines; insects, germs, and contagious diseases; study of the rules of the board of public health with reference to contagious diseases. All lessons emphasize the baby's need for fresh air and cleanliness.

Cleveland, Ohio.—The Cleveland junior high schools give to the girls in the seventh, eighth, and ninth grades, respectively, the following number of lessons in child care and training: *In the seventh grade*—two lessons on how to keep children clean and happy, and how to feed them; *in the eighth grade*—three lessons on the amount, time, and place of sleep, and care in handling, bathing, dressing, and feeding the young child; and *in the ninth grade*—10 lessons on the proper food for children at various ages, proper habits of feeding; and proper standards of cleanliness, recreation, and amusements.

Duluth, Minn., requires of the girls in the seventh grade a three-weeks' course in child care and training. This unit is composed of fifteen 45-minute lessons, and includes the following subjects: The baby's food at various age levels; cow's milk as a food, and the care of bottles; clothing, its selection, cleanliness, comfort, and protection; bathing, the time, temperature, and equipment; sleep, the time, amount, place, and healthful conditions; recreation; protection from crowds, dirt, and insects; kind and amount of play and selection of toys; habit forming as to obedience, neatness, eating, playing, and dressing; truthfulness; courtesy; family responsibility; unselfishness; speech.

Denver, Colo.—The home-economics curriculum committee of the Denver public schools listed the home activities of 5,106 junior and senior high school girls and interviewed 850 parents. Findings of the committee show that 29 per cent of these girls share the care of children of preschool age and that 78 per cent of the 850 parents interviewed recommend child care and training for the junior and senior high-school girls.

The curriculum committee study has resulted in the requirement of a course in the "help with young children" for all beginning eighth graders in the junior high school. The course emphasizes three major points—*personal cleanliness* as to clothing, bathing, and

daily habits; *health habits* as to proper protection of eyes from bright light, desirable and undesirable foods, sleep and naps, airing and exercise; and *recreation and entertainment* as to reading and story telling, poise, sincerity with children, practicing and teaching good manners, and avoidance of frightening children in any way.

An elective course in home making and child care is offered for all senior high-school girls.

D. In Vermont Junior and Senior High Schools

Vermont makes the junior and senior high school work in child care a part of the Christmas service school girls can render to young children. The girls adopt temporarily a young child, whose needs are studied from the physical, mental, and social viewpoints, and organized into the following projects: (1) The child's clothing budget for dresses, underwear, shoes, stockings, hats, coats, and accessories; (2) the selection of materials for construction of clothing or the purchase of ready-mades; (3) the repair and laundering of garments; (4) health habits in feeding, sleeping, bathing, and exercising; (5) the recognition of defects and protection against diseases; (6) observing the psychological principles underlying a well and happy child; (7) listing desirable books, toys, and games suitable for children of preschool age; and (8) enumerating the fundamental rights of the child as to requirements for good health, normal home life, education, opportunities for play and companionship; moral and religious training; and protection from child labor.

The girls may prepare for their adopted child a complete doll's wardrobe, as well as one for the child itself. A Christmas stocking may be filled with appropriate toys, games, and books.

The girls investigate Vermont's provisions for dependent, delinquent, and neglected children, and inquire into the welfare organizations, such as childrens' aid societies, tuberculosis association (preventoriums), day nurseries, industrial schools, homes for destitute children, homes for friendless women, and how a class might aid any one of the above institutions.

From this course in child care girls receive training which enables them to observe either in their own or in a neighbor's family the following points of a preschool child: Physical condition, as to height and weight; muscular development; freedom from defects; number of teeth; regularity in habits of play, thinking, diet, rest, recreation, and hygiene; types of clothing worn; and physical improvement through better play, diet, sleep, and rest habits.

* Each girl selects a child of preschool age to determine his play, health, and mental habits, and his recreative program.

E. Wisconsin's State-wide Child Care Program

In the fall of 1924 ten 1-hour lessons in infant hygiene were incorporated into the State course of study through the cooperative action of the department of public instruction, the Wisconsin State Board of Health (through its bureau of child welfare), the State board for vocational education, and the State board of normal regents. These lessons, except in the vocational high schools, are not mandatory, but the State superintendent of public instruction strongly recommends the infant-hygiene work, for it "meets a vital need in the educational program of the State," and he urges schools to participate in this child-hygiene program.

To insure the aim, "every Wisconsin girl educated for intelligent motherhood," this course of 10 lessons was planned for girls of pre-high school years, although now the course is quite generally offered to girls of the junior and senior high schools. In school systems where this course is given in the grades there is a rapidly increasing movement to provide more advanced work in high schools.

The course may be offered as a part of home economics, physical education, or physiology and hygiene in both city and rural schools. However, the tendency of city schools is to make this work a part of the home economics instruction, although a few schools offer the course in the physical education department. The rural schools include it in physiology and hygiene for the eighth grade.

A semiformal diploma is awarded to all pupils who have had (1) 10 hours' work, exclusive of reviews and examinations, (2) a demonstration of "bathing the baby" and putting up a bottle food formula, and (3) a passing rank of 70 in an oral or written examination. The holding of this diploma entitles the girl to be called one of "Wisconsin's Little Mothers."

The diploma requirements for the infant-hygiene course were met, in 1926, by the girls in 30 of the 44 vocational high schools.

The department of public instruction and the State boards already referred to advise that, where feasible, each one of the 10 lessons be demonstrated. To make this possible they recommend a standardized equipment as a part of the school property of every school where the course is taught—the equipment to include a hospital doll, open-front layette (specially designed commercial pattern), equipment for bathing a baby and preparing an artificial food formula, and a basket bed.

Of the 11 State normal schools, 6 give the infant hygiene course in full and 5 give part of it. Of the 31 county rural normal schools, 13 give the complete course, 15 give part of it, and 3 give only what the State organizer of the infant hygiene course is able to offer at the time of her visit. Of the 21 high schools with teacher-training

departments, 7 give the entire course, 5 give part of it, while 9 give only what the State organizer of the infant-hygiene course is able to offer at the time of her visit. Thirty-eight one-room rural schools give the entire course. Many others give it, minus the demonstrations due to lack of equipment. Of the 5 county schools of agriculture and domestic science, 3 give all the lessons and 1 gives some of the lessons. The full course is given in the State schools for the blind at Janesville and the deaf at Delavan.

The infant-hygiene course, as recommended by the department of public instruction and the three State boards, is an integral part of the public-school systems of certain Wisconsin cities which are classified as follows:

- 9 of the 9 cities with a population of 25,000 or more in the junior high school.
- 8 of the 9 cities with a population of 25,000 or more in the senior high school.
- 11 of the 13 cities with a population of 10,000 to 25,000 in the junior high school.
- 10 of the 13 cities with a population of 10,000 to 25,000 in the senior high school.
- 11 of the 23 towns with a population of 5,000 to 10,000 in the junior high school.
- 11 of the 23 towns with a population of 5,000 to 10,000 in the senior high school.
- 17 of the 37 towns with a population of 2,500 to 5,000 in the junior high school.
- 16 of the 37 towns with a population of 2,500 to 5,000 in the senior high school.
- 15 of the 78 towns with a population of 1,000 to 2,500 in the junior high school.
- 26 of the 78 towns with a population of 1,000 to 2,500 in the senior high school.
- 28 of the towns with a population of 1,000 and under in the junior high school.
- 62 of the towns with a population of 1,000 and under in the senior high school.

The ten 1-hour lessons outlined by the educational agencies of the State are, on the whole, taught by the teachers of home economics; and these lessons, numbered, respectively, from I to X, include the following subjects, as listed by Wisconsin's State organizer of the infant hygiene course:

- I. Purpose of this course of study, home hygiene, handling the baby, baby's clothing, washing the baby's clothes.
- II. Body hygiene, baby's bath.
- III. Food, commercial or proprietary foods, natural food, feeding schedule, additional foods, fruit juices, cod-liver oil.
- IV. Cereals, vegetables, vegetable soups, stewed fruits, hard foods, general rules for additional foods, weaning.
- V. Artificial food, sugar as a food, preparation of cereal water, water, milk, ice, homemade ice box, thermos bottle.
- VI. Utensils needed for preparing a bottle formula, preparation of utensils, estimating the formula, method of putting up a scalded or boiled milk formula, method of putting up a raw or cold milk formula.
- VII. How to give a bottle feeding, care of used bottle and nipple, drink, the bowels, constipation, weight, development.
- VIII. Teeth, sleep, when the baby does not sleep, night clothes, baby's bed, bedroom.
- IX. Outdoor life, care of baby in hot weather, sunshine, rickets, baby's sun bath.
- X. When baby is sick, vomiting and diarrhea, communicable diseases, colds, convulsions, enema, colic, hiccup, eyes and ears, medical advice, habits, birth registration.

CHAPTER II

Child Care and Parenthood Education Offered in Home Economics Departments of General and Vocational High Schools

This chapter outlines typical child care and preparental education offered girls usually in the junior and senior years of (1) general high schools which (a) have no nursery school facilities, (b) have a nursery school in connection with the home economics department, and (c) use a local nursery school of the town, or of an institution located in the same city; and (2) vocational high schools without nursery-school facilities, but as given in (a) a large city, (b) a rural community, and (c) a small town.

A. (a) In General High Schools

The aim of child care and parenthood education in high schools is to teach high-school girls how to help with the care of younger children in the home and to develop in them an appreciation and understanding of the nature of child life. Such a course includes the following topics:

Topic No. 1.—The baby's community surroundings, as to freedom from contagious diseases such as diphtheria, scarlet fever, whooping cough, measles, mumps, and others; impure milk and water; inadequate garbage disposal; insects; insanitary conditions of the home with reference to ventilation of the nursery and the child's bedroom; improper playground facilities.

Topic No. 2.—The baby's physical characteristics and development—normal gain in weight; defects—if any; general condition of skin, eyes, nostrils, mouth, scalp, and body.

Topic No. 3.—The baby's daily schedule as to feeding, bathing, sleeping, and exercising.

Topic No. 4.—Baby's food—(1) proper kind, regularity, and cleanliness; (2) breast feeding and proper food for nursing mother; (3) artificial food, its care, preparation, and advantages; (4) unsuitable foods—meat, coarse cellulose, pastries, sweets, stimulants, cakes, nuts, and others of this class; (5) suitable supplementary foods during first year—fruit juices, cereals, gruels, and strained vegetables; and (6) proprietary foods—kinds, cost, how prepared, and nutritive deficiencies.

Topic No. 5.—Common digestive disturbances of artificially fed babies and their remedies.

Topic No. 6.—Nutritional disturbances, such as malnutrition, rickets, scurvy, eczema, and others, and the symptoms, causes, prevention, and treatment of these diseases.

Topic No. 7.—The baby's clothing—selection and construction from standpoints of health, comfort, and economics; suitability of patterns and materials; serviceability; repairing; laundering.

Topic No. 8.—Influences bearing upon child life—heredity and customs, discipline, economic conditions, opportunities for natural development.

Topic No. 9.—The preschool child as to the development of language, attention, observation, memory, imagination, reasoning, and obedience; moral and religious training; habit formation; and education through suitable plays, games, toys, books, stories, magazines.

(b) In the Nursery School of the Highland Park (Mich.) High School

The Highland Park High School, of Highland Park, Mich., maintains as part of the home economics department a nursery school, and offers to its girls a course in child care and parenthood education. The senior girls devote to this course three 45-minute periods per week for one semester. One class period is given to recitation, lecture, and discussion, and the other two class periods to the duties and observations in connection with the nursery school children ranging in ages from two to five years. In addition to these periods the students devote to the nursery school one entire school day each month.

The students' duties in the nursery school and an outline of the topics discussed are presented below:

1. Students' Duties in the Nursery School

Students supervise children in the cloak, play, and toilet rooms, on the playground, in the setting of tables for dinner, in the washing of hands, brushing of teeth, in story telling, resting before dinner, and in the serving of dinner from the kitchen. They serve water; also orange juice with cod-liver oil. They prepare dinner, eat with the children, and make a résumé of the children's duties in the nursery school which will be advantageous in the home.

The students observe the children from the physical, mental, and behavioristic standpoints.

From the *physical* aspect they observe (1) the child's motor control, in caring for self, unbuttoning and taking off wraps, and helping self at toilet; (2) the child's motor development, as to falling down easily, balancing self with difficulty, using both hands and feet in crawling up and down stairs, climbing without using either hand, manner of rising from chair to floor, frequency in dropping or spilling objects while handling, and the manner of carrying tray; (3) the child's food, as to choice, amount eaten, habits in eating, and methods used to interest him in eating foods served; and (4) the child's clothing, as to kind of textile (wool, silk, cotton, or linen), style of garments, amount, and hygiene in general.

From the *mental* standpoint the students note the child's development by means of his (1) language, as to vocabulary and sentence formation; (2) interest in stories—whether he listens attentively.



NURSERY PLAYROOM. HIGHLAND PARK HIGH SCHOOL, HIGHLAND PARK, MICH.

tells old stories, or makes and tells new stories; (3) interest in music—whether he listens attentively, keeps time by clapping, in singing, or in marching, and whether he dramatizes play and song; (4) work and play at home and in school; (5) imagination in building with blocks, drawing, and modeling; and (6) interpretation of music, pictures, and stories.

From the *behavioristic* standpoint the students observe the following qualities of the child: (1) Fear; (2) love—how it is shown; (3) willfulness with older children or adults; (4) responsiveness; (5) truthfulness; (6) attitude with other children—whether leaders, followers, selfish, or unselfish; (7) fairness in settling disputes; and (8) reverence.

2. Classroom Topics

The topics discussed in the classroom are: Parents' responsibility to the child, child's stages of development, ailments and injuries of childhood, causes of infant mortality, food for the young child, clothing for the young child, heredity and environment, education of the little child, habit formation, emotions, behavior problems, punishment, stories as an educational factor in the child's life.

B. In the High Schools of Peterborough, N. H., and Detroit, Mich., Using Local Nursery Schools

Peterborough, N. H.—In 1926 the Peterborough High School offered to five senior girls in the department of home economics an eight weeks' unit of class instruction in child care and training, and made possible for these students observation privileges in the nursery school of that city.

The classroom discussions centered on (1) minimum standard of food consistent with the normal development of children; (2) amount of clothing needed; (3) medical and dental care; (4) wholesome play opportunities; (5) adjustments to home, playmates, school, and work; (6) the abnormal child, as to stubbornness, depression, unruliness, deceit, and truancy; (7) the psychopathic child, as to cause, symptoms, results, and precautions.

For observation work in the nursery school, the students observed (1) environment, as to the presence or absence of noise, amount and direction of sunlight, ventilation, temperature, and condition of playground; (2) equipment as to room furnishings and educational apparatus; (3) physical aspects of the children, as to range and limit in ages, medical inspection, posture, exercise, personal health habits, real life activities, clothing, free play, motor control, and atmosphere—whether free, happy, or repressed; (4) developmental program, as to the presence or absence of (a) individual habits concerned with concentration, initiative, obedience, orderliness, persever-



CHILDREN SERVE THEMSELVES. HIGHLAND PARK HIGH SCHOOL, HIGHLAND PARK, MICH.

ance, and self-responsibility, (b) social habits concerned with courtesy, desire of attention, fair play, leadership, and responsiveness, (c) self-expression shown in choice of songs, explanation of pictures, recounting experiences, dramatizing stories and play, occupation, choice of colors and design, sense of rhythm, and manual proficiency; (5) interest, enthusiasm, and judgment of the children; (6) the program as to whether it was educational or informational; and (7) school discipline to determine whether there was self-control, absence or presence of pugnacity, selfishness, fortitude, and respectfulness of children to teachers.

Detroit, Mich.—The principal of the Southeastern High School writes that the child care and training course in their high school has beneficial results on their girls to the extent that he believes such a course should be made compulsory for all senior girls because the work gives them an understanding of home-making responsibilities.

All 12-B senior girls in this high school take the work in child care and training, with observation privileges in the nursery of the Merrill-Palmer School.

The time allotted to the course is four single and one double period per week for one term. The course consists of lectures given by outside agencies and teachers, class recitations, discussions, and reports by the students. The subject matter of the course includes home-making education, child care, and child training.

1. *Home-making education* includes a study of (1) the evolution, purpose, and qualities contributing to the stability and instability of home and marriage; and attributes of an ideal home maker; (2) eugenics and biology bearing upon the significance of good hereditary traits, fitness for parenthood, necessity for national marriage and divorce legislation, existing marriage laws with respect to age limit and qualifications, legal reasons for divorce, and the story of life as found in the reproduction of plants, insects, birds, and mammals; (3) prenatal hygiene emphasizing the mother's care as to diet, clothing, and exercises; (4) layette materials and design; and (5) nursery equipment as to daily care, furnishings, and type.

2. *Child care* stresses infant care and hygiene. The following topics are included: Food, clothing, bathing, sleep, exercise, recreation, crying, and care of teeth, eyes, ears, nose, and feet.²

² Students visit creamery to see how milk is cared for. They pasteurize milk; prepare formula of modified milk; suggest ways to disguise milk; state what foods are injurious to young children; plan menus appropriate for different ages; list vegetables for mineral salts; indicate ways of serving vegetables appealing to the child's mind; enumerate some of the child's food idiosyncracies and remedies; outline important principles underlying good food habits; list fundamentals involved in the correct feeding of the preschool child; prepare food for children's party. The students also play with and exercise the baby; list reasons for objections to pacifiers, thumb sucking, and mouth breathing; demonstrate good technique of infant bathing; illustrate good designs for clothes; and read to a young child at home.

3. *Child training* comprises a study of (1) the educative principles concerned with plays and games as to their mental and physical training; play habits; story telling; hand work that develops fundamental muscles; music and art; sensory and motor expression; aimless work with pencil, the discovery of resemblance to familiar objects, and actions repeated with definite aims and methods; proper speech habits; attention; observation; memory; imagination; reasoning; morality; obedience; and discipline; (2) obedience, as concerned with futility of foolish commands; negativeness; indefiniteness; indirectness; and demands made of the child beyond his mental, moral, and physical capacity; (3) legitimate satisfiers for good conduct, such as simple gifts earned by the child, picnic trips to the zoo, gold and silver stars on good conduct charts, praise for effort made, and certain privileges; (4) illegitimate satisfiers, such as bribes, rewards of candy, frequent movies, deviation from habits not yet formed, and refusal which after teasing turns to consent; (5) legitimate annoyers for poor conduct, such as deprivation of articles abused, isolation until child is in a pleasant mood, spanking as a definitely planned physical stimulus, and deprivation of dessert when vegetables are refused; and (6) illegitimate annoyers, such as whipping, putting to bed without supper, nagging, frightening into good behavior, shutting in dark closet, criticizing child before other people, and retracting of promise for reasons not understood by child.

C. In Certain Vocational High Schools

(a) *The Lucy T. Flower Technical High School of Chicago, Ill.*, includes in the last semester of a four-year home-making course a unit of child care and training consisting of five 45-minute periods per week for 20 weeks.

This course stresses the fundamental rights of the child as to (1) good heredity and degrees and causes of feeble-mindedness; (2) the establishment of physical health from prematurity through childhood and adolescence by means of medical supervision, hygienic living, adequate food, clothing, and shelter; (3) normal home life in connection with the physical conditions of the home and the attitudes of the parents; (4) education concerned with habit formation, training of child's will and control of emotions, literature for children, the teaching of self-reliance, and the training in morals and religion; (5) recreation and companionship through growth and play; and (6) protection against exploitation of child labor in the city and country.

(b) *The Lampeter (Pa.) Rural Community Vocational High School* offers to the senior girls taking the home-making course a unit in child care and training. This unit consists of three class

periods per week for one semester and includes the following problems:

1. *Is our rural community an ideal place to live in* as to housing conditions; sanitary and adequate food, milk, and water supply; sanitary waste disposal; freedom from pests and insects; and accessibility to hospital and medical aid?

2. *What points should be taught to insure the baby's health and happiness* concerning his (1) food as to quality, amount, regularity, preparation of artificial food, and cleanliness of feeding utensils; (2) clothing, as to selection, quality of materials, construction, care, and laundering (class makes layette for poor family in community or local charitable institution; students also compare cost of layette made by them with one ready-made); (3) bathing, as to method, temperature of water, and articles needed, demonstrated by health nurse at clinic in city, or by visiting nurse at school; (4) sleep, as to time, place, and conditions; (5) nursery, as to proper light and ventilation, convenient location, necessary equipment and furnishings; and (6) normal physical development, as to means for exercise?

3. *What can be done to aid the development of the preschool child* as to food, clothing, cleanliness, health habits, fresh air, exercise, constructive play, physical training, sleep, and regular habits?

4. *What are the conditions of the rural school* as to adequate sanitation, ventilation, heat, and fire protection; individual drinking cups; play facilities; transportation to and from school; and facilities for a hot lunch? Hot lunch improves diet and digestion, increases appetite, gives variety, and increases the total calories. Milk, milk soups, or cocoa increase the adequacy of the diet. The serving of hot lunches in school is also a means of teaching home economics, and develops cooperation and team work.

5. *What can our class do to raise the health standard of the community*, especially in the treatment of malnourished children?

6. *How may the spread of infectious diseases be avoided?* By changing the attitude that common children's diseases are inevitable and best for children to have while young, and by controlling the spread of infectious diseases through prevention, resistance, and efficient community cooperation.

7. *The training and management of the rural school child* in regard to (1) physical development through wholesome food, regular sleep, outdoor exercise, and protection from overstrain; and (2) mental development through constructive play and recreative experiences; group play, under adult leadership, as an educational factor in fairness, cooperation, and kindness; regular household duties; weekly allowance; and development of responsibility and thrift.

8. *Sex hygiene*.—A lecture is given by a woman physician to girls in the high school on "Reproduction and venereal diseases."

9. *The adolescent girl* in regard to the period between childhood and womanhood.

10. *Prenatal care* concerning the necessity for medical care and supervision during pregnancy as a safeguard to the future welfare of the child; the character and amount of food; body elimination; prevention of fatigue; suitable clothing, rest, and sleep; outdoor exercise.

11. *Does the child have the right to be well born?* The obligations due the child are good mental and physical inheritance; happy, wholesome environment; best possible care and training; sympathetic understanding; good examples; preparation for life; and opportunities for proper companionship.

12. *Is child labor a problem* from the standpoints of health, education, poverty and dependency, delinquency, industrial waste, and social loss?

13. *What child-welfare agencies, both public and private, promote child welfare* through health plays and campaigns, education, girls' clubs, libraries, and through the dissemination of child-welfare literature?

(c) *The Benton (La.) Vocational High School* offers to the senior girls ranging in ages from 16 to 18 years three courses in the welfare of the child. These courses consist of an 18 weeks' unit of two 80-minute periods per week in child care and training, a 9 weeks' unit of five 40-minute periods per week in child psychology, and a 9 weeks' unit of four 80-minute periods per week in children's garments.

1. *The child care and training course* emphasizes subject matter bearing on (1) the family as an institution, and the right concepts of home and family life; (2) infant and child life as to heredity and customs, environment, family discipline, and temperamental qualities; (3) physical rearing of children with reference to prenatal care; birth registration; public activities for the protection of maternity, infancy, and childhood; mothers' pensions; milk stations; baby clinics; day nurseries; "Little Mothers Societies"; proper feeding; bathing; dressing; amount of sleep; fresh air; and recreation; (4) mental training of children as to the relation of physical health to mental health; development of instincts such as fear, curiosity, imitation, social response and communication; and the development of motor control in handling objects and clothing; (5) play life of the child as an education through activity in and out of doors; (6) educational value of plays, games, toys, books, story telling, songs, and rhythm; (7) the child's adjustment to school and fundamental habits concerned with sleep, eating, toilet, dressing, personal cleanliness,

play, and study; participation in home activities; obedience, rewards; and readings.

2. The *course in child psychology* emphasizes (1) the problems of child study as to the difference between children and adults, the significance of infancy, how the inner tendencies are developed and modified by outer influences, instincts, habits, intellect, will, and training in the development of morality and religion; (2) physical growth and development; (3) kinds of native movements and general order of development; (4) classification of instincts; (5) devel-



NOONDAY MEAL
Merrill-Palmer School of Home Making, Detroit, Mich.

opment of the individualistic, parental, social, moral, and religious instincts; (6) development of imitation, play, and curiosity; (7) development of intellect; (8) heredity; (9) individuality and characteristics of children; and (10) childhood and adolescence.

3. The *course in children's garments* comprises (1) selection of clothing from health, suitability, and economic standpoints; (2) ready versus home made layettes and clothing for the older child; (3) the choice of materials and patterns; and (4) the care, repair, and laundering of children's clothing.

CHAPTER III

Child Care and Parenthood Education in Higher Educational Institutions with Nursery School Facilities

This chapter briefly presents the policies advocated; programs offered; in some cases, the subject matter considered, time allotted, a description of the equipment installed, and in and out door play-things provided in nursery schools of home economics departments in the two privately endowed institutions of higher education—the Merrill-Palmer School and the University of Chicago—in the Municipal University of Cincinnati, and in a number of State colleges and universities.

A. The Merrill-Palmer School, Detroit, Mich.

The Merrill-Palmer School of Home Making trains young women in the care and management of children by means of the laboratory method. For this purpose the school maintains two nursery schools for children from the ages of 1½ to 5 years and offers courses of college grade in child-care and parenthood education.

The work in the Merrill-Palmer School is so organized that students of senior and graduate rank, selected by the respective faculties of their universities or colleges, may remain in residence for a term or semester. During this short period the students' training is not sufficient to make them specialists or directors of nursery schools, but prepares them to meet successfully many child care and training problems.

A limited number of graduate students of suitable educational background may be appointed for a longer period of time to undertake researches concerning special phases of the preschool child, including those of nutrition, clothing, bodily habits, daily régime, physical growth, mental development, personality adjustments, and educative material.

A summary of the educational program as considered in the Merrill-Palmer School of Home Making is outlined as follows:

1. *Preparental instruction* for (1) Resident college and university students who receive daily class instruction in educational methods and theory as related to the physical and mental growth and charac-

ter development of children, and who supervise daily the practical work of the children in the nursery school; (2) Detroit's high-school senior girls who receive, in their respective schools, child-care instruction in short-unit courses and who have opportunities for observation in the nursery school; and (3) professional groups, including nurses, public-school home-economics teachers, and day nursery matrons who receive instruction in unit courses of varying length and have a limited amount of observation.

2. *Parental instruction includes* (1) individual instruction for (a) parents of children in the nursery school, through the child itself, special staff conferences, daily contacts of children, physical examinations, records and blanks, home visits, monthly meetings, topics suggested by school experiences, and social hour at the nursery school; (b) parents of children brought to the consultation center, through interviews, facts determined by experts on intelligence tests, personality traits; physical, medical, nutritional, and social services; procedure prescribed, supervised reports, and bibliographies suggested; and (c) outsiders seeking assistance from specialists, through hospital and board of health clinics, prepared readings, and conferences at school; and (2) group instruction for persons outside the nursery school, such as American Association of University Women, State extension clubs, and parent-teacher associations through organized courses and special lectures.

3. *Researches concerned with the child* are in the fields of (1) *psychology*, which deals with the child's sleep, art, enuresis, laughter, vision, hearing, performance, and personality traits; and for the parent in each case as subject matter and methods needed (2) *physical growth and development*, which include normal rates, signs of fatigue, physical activity,—quantity and quality, factors influencing



HE IS USING HIS IMAGINATION
Merrill-Palmer School of Home Making, Detroit, Mich.

appetite, and occurrence of chalky spots in teeth; (3) *education*, which emphasizes desirable picture books, vocabulary, stories, correlation of physical activity with other factors, and value of blocks; (4) *sociology*, which relates to the value of cooperative games and play as a socializing influence to the effect of home environment on children's vocabulary; (5) *dentistry*, which bears upon the child's dental curves, loss of deciduous teeth, and rates of growth of the jaws; (6) *nutrition*, which includes quantitative vitamin values of mixed human milk, physiological factors influencing milk secretion, effect of diet upon reproduction, lactation of animals and the subsequent growth of the offspring, relation of the chemical composition of the blood to the milk secreted at definite intervals of lactation under known conditions, therapeutic value of irradiated food materials; *Oscodal*, a commercial concentrate of cod-liver oil, and varying quantities of cod-liver oil in the treatment of rickets as determined by biological, röntgenological, and historical analyses; and (7) medicine, nutrition, sociology, and psychology combined as demonstrated at Grosse Ile, De Bois Health Center, Mich., in schools, and with special groups and classes.

***B. The Department of Home Economics and Household Administration,
University of Chicago, Chicago, Ill.***

The University of Chicago offers, in its department of home economics and household administration, courses in child study. These courses are "child care," "the psychological study of young children," and "practice in the feeding and physical care of children in the nursery school."

The university cooperative nursery school is a laboratory for two classes of students—those who are preparing to become teachers of child-study classes, and those who have direct care of children, including the mothers of the children. The prerequisites for the course in "observation and care of children in the nursery school" are "dietetics for children" and "child care." These courses in turn carry their own prerequisites. The child-care curriculum requires of students not specializing in home economics 27 majors of university work.

The courses in child care emphasize—

1. *Physiological reproduction*, concerning prenatal care, prevention of pregnancy complications, preparation for confinement, care of new-born baby, lying-in period.

2. *Adequate food for the prospective mother*.—(1) *Milk*, from 1 pint to 1 quart daily to supply the needed lime for the baby's teeth and bones; (2) *vegetables*, besides potatoes, at least two servings of either spinach, boiled onions, carrots, string beans, and others, and a

salad of one raw vegetable; (3) *fruits*,¹ two daily servings of fruit, one raw, as orange, apple, or grapefruit, and one cooked, as prunes or baked apple; (4) *proteins*, one egg, at least the yolk, every day or several times a week because of its iron content (the mother's food should furnish an iron supply to the baby during his nursing period); meat, fish, or fowl, only small daily servings or not at all (if eggs and milk are relished, they should be eaten instead, and the doctor may prescribe them in preference to meat, fish, or fowl); (5) *carbohydrates and fat*, whole-wheat cereals as oatmeal, cracked wheat, or whole-grain bread; bread with butter at least once a day to supply iron and prevent constipation²; (6) *water*, at least six glasses per day



MUSCLES ARE EXERCISED
Merrill-Palmer School of Home Making, Detroit, Mich.

to carry off the wastes of the body and to supply the needs of the new baby; (7) *coffee and tea*, not more than one cup per day; and (8) *amount of food*, determined by weight and appetite. One quart of milk consumed supplies the baby's needs. If there is an undue increase in weight, the amount of sugar, bread, potatoes, and desserts may be reduced or left out of the diet entirely.

Caution: Milk, eggs, vegetables, fruits, and whole cereals are essential, with a minimum amount of pies, pastries, and fried dishes. Foods craved may be had, if not harmful.

3. *Infant feeding*, as to (1) energy requirement concerning (a) basal metabolism, how determined (work of Murlin and Hoobler,

¹ Fruits and vegetables supply vitamins, minerals, bulk, and water to the body.

² Constipation can be corrected through the use of vegetables, whole-grain breads or cereals, stewed prunes, figs, boiled onions, molasses, or orange juice on an empty stomach, bran put on cereals or in muffins, or apples eaten with the skin.

Benedict and Talbot); (b) total energy needs; (c) factors increasing metabolism above basal and average figures for total energy needs of children; (2) protein requirement for growth and repair; amount needed; quality; function, effect, and dangers of too much or too little; (3) distribution of nonprotein calories, example, carbohydrates and fats; (4) mineral requirements, purpose of those needed; (5) vitamin requirements, effects of shortage of each; (6) breast feeding, inherent right of every child, advantages; diet of nursing mother, and effect on amount and composition of milk; anatomy of breasts; gland development; milk production; composition, variations, and nature of constituents of milk; contra-indications; nursing technique;



OUR DAILY DOZEN
Ohio State University, Columbus, Ohio

weaning; mixed feedings; wet nurse—value of and objections to; extent of transmission of drugs, alcohol, cathartics, and chloroform through mother's milk; (7) artificial feeding, its meaning and indications; composition of cow's milk versus human milk; methods of modifying, and objections to top milk; data needed to plan and illustrate a simple milk modification for 4-month-old baby 12 pounds in weight, composition of the mixture compared with human milk, kind of sugar used; diluents—administering of food, amount to begin with, and how to increase it; regularity in, intervals between, number of, and night feedings; methods of judging the success of feeding; when, why, and how to introduce other foods, such as (a) water, (b) antiscorbutic, (c) antirachitic, (d) vegetables, cereals, fruits, potatoes,

meats, and hard breads; and (7) proprietary foods—defined, classified, value, if any, of each, and objections summarized.

(4) *The preschool child* in regard to (1) importance of preschool period, so often neglected; (2) description of normal healthy 5-year-old child as to bony structure, musculature, degree of plumpness, amount of subcutaneous fat, posture, skin, teeth, sense organs, general facial expression, and mental habits; (3) factors conducive to the development of a healthy normal child, such as (a) healthy environment—whether rural or city home, or flat; (b) proper diet; and (c) proper health habits in sleeping, eating, exercising out of doors, dressing hygienically, caring for teeth, and avoiding fatigue; (4) training in the development of good habits; (5) play, its theories and contribution to the physical and mental development of the child; (6) sleep, its physiological significance, amount needed, regularity, and value; and (7) physical care, necessity for fresh air, sunshine, and proper ventilation; prevention of diseased tonsils, adenoids, and enlarged glands.

C. The School of Household Administration of the University of Cincinnati, Cincinnati, Ohio

When the School of Household Administration of the University of Cincinnati was established in the fall of 1924 it was organized into five major departments. One of the major departments is child care and parenthood education. The purpose of this department is to reach the college students, and as far as possible the parents in the community.

The director of this special field of education offered mothers a course in the care and training of children. This course enlisted the interest of the Mothers' Training Center Association, an organization made up of some of the most outstanding citizens who through financial aid have enabled the school of home economics to form a nursery school where parents and students may observe the play, games, materials, and occupations suited to the preschool period, as well as the methods employed in setting up desirable habits. Besides the operation of the nursery school, there are exhibits of books and toys for young children, and books on topics of interest to parents.

The child development and parental programs offered in the school of household administration are for students who desire to become trained workers in the fields of child care and nursery school education. These students may elect work not only in nutrition, household management, child development, and parental education but also in the colleges of education and medicine and in the departments of psychology and sociology.

If students desire to specialize in child-health work, electives are chosen in sociology and in the school of nursing and health; if in child behavior, only electives are selected in the department of sociology.

For the foregoing students the following curriculum is outlined:

Junior year.—Nutrition, mental and physical growth of children, child management, social and legal provisions for children, and pediatric nursing and child hygiene.

Senior year.—Habit training, special child problems, woman in her relation to social order, principles of buying, and problems of citizenship. Beyond this work special problems are offered in nutrition, plays and games, and field work.



THE NOONDAY MEAL

Kansas State Agricultural College, Manhattan, Kans.

For students preparing to direct a day nursery or a nursery school or to teach child care and training in high schools the following curriculum is suggested:

First year.—Nutrition, mental and physical growth of children, child management, introduction to study of education, history of education, and pediatric nursing and child hygiene.

Second year.—Habit training in the home, special problems in child training, woman in her relationship to the social order, social and legal provisions for children, principles of buying, teaching in high school, school organization and management. Further work may be elected in the college of education, concerned with student teaching, methods and materials for nursery schools, and organization.

The College of Home Economics, Cornell University, Ithaca, N. Y.

The College of Home Economics of Cornell University provides child care and parental education for junior and senior students enrolled in the university and for parents either as special or regular students who have satisfied the requirements. The college offers both practical and theoretical work.

The latter includes courses in psychology, child training, hygiene, clothing, and nutrition.

The practical phases of child study are supplied in the nursery school, where 22 children ranging from 2 to 4 years of age are en-



CONSTRUCTION FORCE
Kansas State Agricultural College, Manhattan, Kans.

couraged to develop initiative, independence, and self-reliance. For this purpose the laboratory is equipped as to size and form suitable for short legs and arms, and interesting to 2, 3, and 4 year olds. Ten-inch washbowls and toilets are in themselves sufficiently attractive to challenge experimentation and to repulse adult assistance. Also, the competition aroused among 22 children to see who can "finish first" is sufficiently stimulating to make the youngest and most timid bold in waiting upon himself.

The tiny lockers, so invitingly numbered with pictures from Mother Goose rhymes, are an incentive to hang up coats and hats and put rubbers or galoshes in their proper place.

That children might learn early to appreciate ownership and property rights, each child is given, to care for, a cot, blanket, towel, wash cloth, toothbrush, and comb. These articles are carefully labeled and become the child's possessions, not to be shared but to be regarded as personal property worthy of the best care and attention.

The children's responsibility for the equipment is further developed by assigning to them little tasks such as dusting chairs and tables, putting playthings in order, setting the tables, washing dishes, watering flowers, and other similar housekeeping duties not regarded as tasks but jolly games. The nursery school's two rules are "every-



INEXPENSIVE EQUIPMENT

College of Home Economics, Cornell University, Ithaca, N. Y.

thing must be put back in its place when no longer in use," and "every task attempted must be completed."

If the child has been unwise in his choice, that fact is demonstrated to him and help is introduced before he becomes too fatigued to profit by the experience.

The children choose their own activities in and out of doors. This gives them opportunities to exercise their own judgment and make social contacts on a level commensurate with their development.

Experience shows that inexpensive toys, such as large building blocks, wagons, old pots and pans, fit best into the child's imagination in village, house, and store building and equipping.

Good food habits are established by a happy environment and methods of play. Setting the tiny table with attractive china, serv-

ing one's self, withholding dessert until the last, and the general happy atmosphere of the nursery relegate food idiosyncrasies into the background.

Motor control is helped along as well as afternoon naps by the out-of-door play with ladders, teeters, piles of sand, wagons, and an incline.

All the children love the game of getting ready for the afternoon nap. The scurrying for slippers, the racing up three flights of stairs and finding one's own cot, and the privilege of wrapping up in one's own bright-colored blanket, all give "zest" to sleep. Directly after the nap is the excitement of getting ready for the bus, which takes each child home.

While these 22 children are absorbed in the tasks adapted to their development, the college seniors observing them are discovering the important part environment and method play in the happiness of the child and the importance of understanding a child.

The college of home economics for 1925-26 granted two \$1,200 child-care fellowships, stressed child care in the farmers' week program, planned two child-care institutes, conducted a child-care clinic for parents whose children attended the nursery school, lectured to the parent club, and prepared for those parents of the State not reached by the extension program (1) a series of bibliographies on books for parents and children, (2) radio talks on feeding, clothing, games, child hygiene and care, mental and behavior problems, and (3) a set of 12 mimeographed lectures on child training.

Through the extension division connected with the home bureau of the State, child-care education was made possible to mothers and often to fathers through (1) institutes of five-day programs in centers chosen by the county agents, (2) follow-up work with mothers as outlined by specialists, (3) concentration of parents on some particular child-care project, (4) monthly discussion groups, (5) correspondence with individual mothers in their particular problem, and (6) cooperation of health agencies, such as local and State boards of health, county Red Cross, social hygiene, parent-teacher associations, and others.

E. School of Home Economics of Purdue University, Lafayette, Ind.

The School of Home Economics of Purdue University offers to women students not majoring in home economics a three-hour course throughout the year in home nursing and the management and care of children.

It offers to its majors in home economics a two-hour semester course in child care and management, a two-hour semester course in observation and practice in the nursery school, a three-hour semester

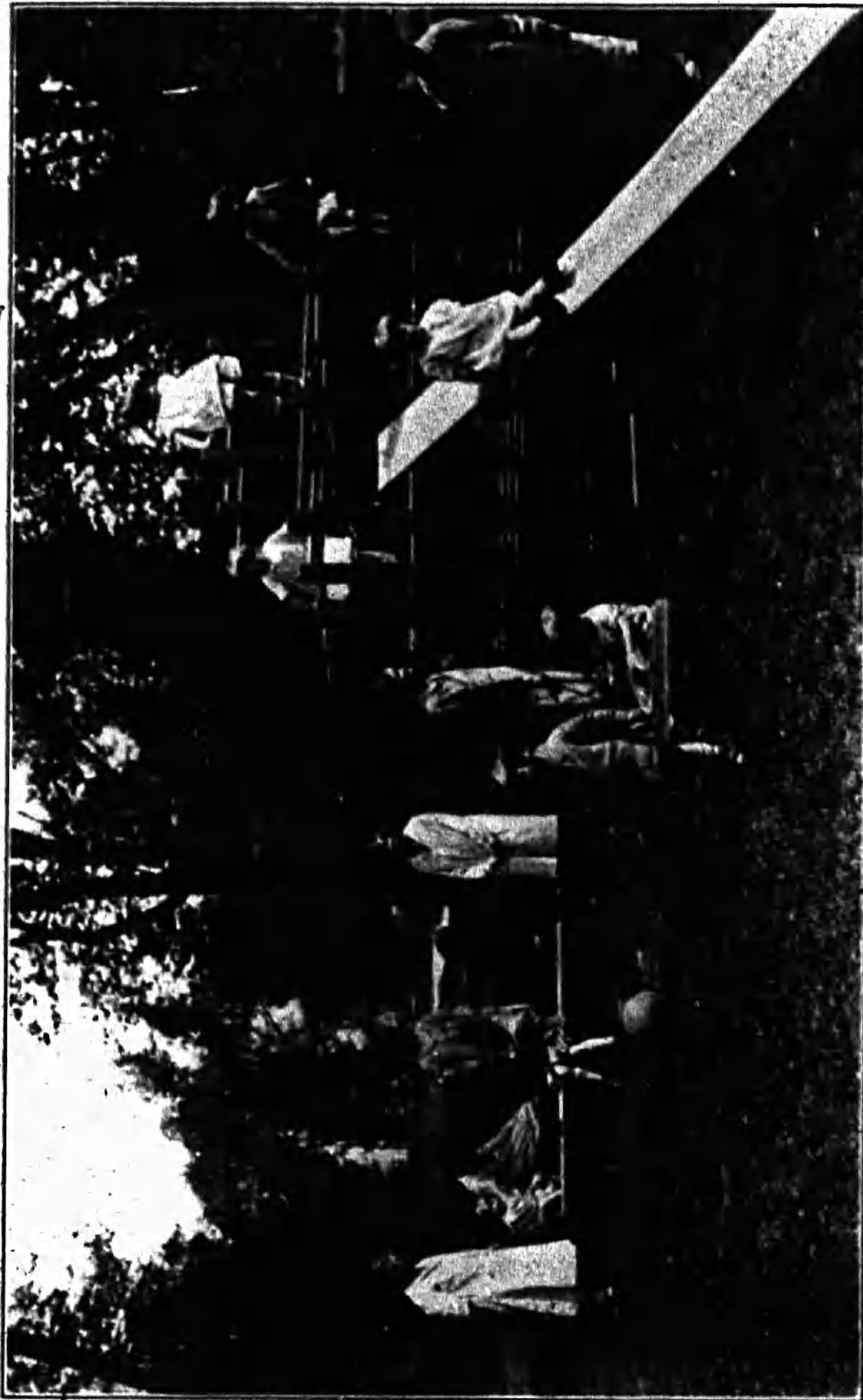
course in child psychology; also the usual work in child feeding and hygienic clothing found, respectively, in the nutrition, dietetics, and clothing courses.



CHILDREN SET THE TABLE
College of Home Economics, Cornell University, Ithaca, N. Y.

The child care and management course for senior students includes (1) history of the nursery-school movement, purpose of nursery-school work, number and types of nursery schools in the United States, and methods employed in the conduct of nursery schools; (2)

eugenics, inheritance, and environment; (3) child and maternal mortality, causes and methods of prevention; (4) women in industry; (5)



PLAY IN THE OPEN
Purdue University, Lafayette, Ind.

prenatal care, personal hygiene as to diet, clothing, sleep, cleanliness, care of bowels, care of breasts, and complications that may arise; (6) postnatal care of mother and child; (7) infant care as to equipment,

housing, personal hygiene, habit formation, and intelligent stimuli for proper development; (8) care of the preschool child as to growth, mental development, habit formation, punishment, recreation, books, and music; (9) care of school children; (10) adolescence; (11) malnutrition; (12) demonstrations in connection with lectures, such as bathing of baby, and layettes; (13) discussion of nursery-school problems, such as history and health habits of baby's family, physical and psychological examinations of children, detailed reports according to personality outline (given herein); (14) field trips to baby clinic, juvenile court, open-air school, and children's hospital; (15) reference work and required papers concerning history of children, child labor, boy and girl scout movement, camp-fire girls, camps for children, health teaching, and bibliographies of literature on child care.

The nursery-school enrollment is limited to 15 normal children between the ages of 2 and 4½ years. School hours are from 9 to 12 o'clock, five mornings each week. The school has an outdoor playground and is housed in one large room in the home-economics building.

All children admitted to the nursery school must be free from colds or any signs of an infectious disease. They are thoroughly examined by a physician of the medical department of the university and by a psychologist of the education department.

The daily program has an approximate routine, but is rather informal and flexible. Wagons, balls, a jungle gym, and sand box provide for vigorous play out of doors. Substitutes for this type of play during inclement weather are an indoor sand box, a long corridor, in which to run and play with bean bags, balls, and kiddie cars. To stimulate creative ability and self-expression, play is provided by work with raw materials, such as clay, beads, blocks, section puzzles, wooden insects, crayons, colors, toys, and the like. Group play consists of rhythm and dramatization.

Individual towels and wash cloths are provided in the lavatory. Parents are asked to supply an extra set of clothing for use if the need occurs. Separate lockers for wraps are available. The individual toilet supplies and lockers are designated by decorated tags.

Much attention is paid to the inculcation of good health habits in the way of cleanliness, elimination, and food habits. The formation is stressed of other good habits such as perseverance, unselfishness, obedience, attention, self-reliance, and cheerfulness.

The children have a mid-morning lunch. They set the tables, serve the food, and wash the cups—a much prized privilege. A phonograph playing bird-call records or similar ones provides a starting point for table conversation.

The students give the children close but unostentatious supervision. They use the mimeographed outline for personality study (given below) as a basis for their observation. They assist in the physical examinations, and observe the psychological testing. They include in their final reports the biological, physical, mental, and social status of the child.

The students' *personality study of the child in the nursery school* includes the child's history—name, date of birth, health and nationality of family, parents' occupation, and home discipline; home and community environment; school attendance; physical and mental examinations; and personal observations concerning the following:

1. *Control of body* in regard to (1) normal activity; (2) general skill; (3) equilibrium—whether falls or stumbles easily; (4) locomotion, in running, walking, jumping, climbing, swinging, tricycling; push self in cart, and enjoying seesaw, slide, or other apparatus; (5) posture; and (6) habits in eating, sleeping, and eliminating.

2. *Development of motor control* in skillful use of hands; handling objects and placing toys in order; carrying and pouring liquids without spilling; turning water off and on; hanging up towels; carrying chairs; manipulating scissors, plasticine, and chalk; feeding, dressing, and washing self; lifting, pushing, pulling, kicking, aiming, throwing, striking, and catching.

3. *Speech*, as to clearness, fluency, defects, if any, and whether words, phrases, or sentences.

4. *Sensory perceptions*, such as (1) touch, in child's desire to gain knowledge through feeling things; (2) sight, in child's ability to describe objects, distinguish slight differences in colors and things, and to make recognizable drawings or models; (3) hearing, in child's response to noise, music, rhythm, poetry, and verbal directions; and (4) taste and smell, in child's ability to distinguish slight differences in them.

5. *Emotions such as love, fear, and anger*—when and how shown and controlled, and related emotional attitudes as to readiness in expression, contentment, happiness, joy, depression, sulkiness, excessive excitement, laughter, crying, jealousy, sense of humor, and self-dependence.

6. *Higher mental powers*, such as (1) curiosity in experimenting with things, and interest in actions of others; (2) memory, strengthened through games, tasks, and discipline; performing completely his daily duties; and past happenings—how long remembered; (3) imagination, whether normally vivid; in telling and acting stories and nursery rhymes; and in drawing or modeling; (4) reasoning by simple inference; by concluding from previous experience; and in

accomplishing a desired end; and (5) will power, whether strong or weak; and as to stubbornness, defiance, and ability to do desired or difficult and unpleasant things.

7. *Moral and social qualities*, in regard to (1) self-assertion, strong or weak; whether rights are maintained and those of others respected; whether politeness is manifested; (2) pugnacity, as to courage, self-reliance, qualities of excelling others, enduring difficulties, pleasures derived from inflicting pain on self and others; (3) sociability, as to whether child is leader, follower, polite, sympathetic, generous, and kind to other children; (4) approbation, whether child is sensitive to praise, blame, and obedience; and easily guided from bad course of action to a good one; (5) ownership, whether child understands meaning of ownership, and knows his own clothes, books, and toys; (6) nurture, as to thoughtfulness and care for younger children or animal pets; and (7) spiritual worship, whether child is respectful, trustful, loving, reverent, quiet during grace; shows wonder or looks surprised at happenings and things; appreciates beauty, music, flowers, pictures, and expresses joy in ability to accomplish.

8. *Desirable characteristics*, pertaining to (1) health habits, such as personal neatness in washing hands before eating, keeping fingers away from mouth, nose, and ears, using handkerchief properly, covering mouth when sneezing or coughing, making proper use of drinking apparatus, standing and sitting correctly, making his physical wants known, and respecting attitudes toward candy, cake, and gum, in the nursery school.

(2) Mental abilities, in discriminating property; being attentive when addressed; articulating clearly; naming the parts of the body, objects in school room, environment, home, and street, correctly; distinguishing colors; experimenting with objects; asking for assistance; persisting in activity; listening attentively to the end of a story, song, or nursery rhyme; singing remembered tunes; representing ideas pictorially in play; enjoying funny situations; planning projects in advance; holding them in mind until completed; and running errands satisfactorily.

(3) Personal habits, in making adjustments easily to new situations, facing difficulties with action, obeying authority, responding to signals, telling the truth, reporting mishaps, helping cheerfully in tasks, hanging up outer clothing properly, eating properly, closing doors quietly, and valuing possessions.

(4) Emotional stability, relating to cheerful behavior in case of fear, jealousy, or homesickness; or when corrected, playthings are lost, or own way refused.

(5) Social and moral habits, regarding friendliness toward other children, sharing toys willingly, settling his own difficulties, waiting

his turn, playing and working fair, liking group activities, tattling, or stealing.

F. Division of Home Economics of Iowa State College, Ames, Iowa

The division of home economics of the Iowa State College offers, as a part of its home-making curriculum, courses in child development and parental education. The work at this institution is a unit of a state-wide program in child welfare which has the advice and guidance of the Iowa Child Welfare and Research Station at Iowa City.

Iowa State College has attempted to see child life in the light of its many contacts with adult work and to use all the departments of



OUTDOOR ACTIVITIES
Iowa State College, Ames, Iowa

the college contributing to the analyses and studies of childhood problems. Cooperation and suggestions have been used from the departments of nutrition, psychology, physical education, and hygiene for the development of a well-rounded program.

The work is organized for four classes of individuals: (1) The senior women, the greater number of whom will soon be home makers and parents; (2) those who are already parents; (3) graduate students who want advanced work in child study; and (4) the children who attend the nursery school.

The residence course in child care and training is required of all seniors in home economics. The prerequisites are dietetics, child psychology, and general physiology. One year's credit is given for

this work. A course in the department of vocational education which is called "teaching child care" is given in the summer sessions. This course is planned to meet the needs of teachers who expect to incorporate child-care work in their home-economics classes. A course in the noncollegiate department is offered to women who are taking the "home-maker's" unit. Students in all of these courses spend one and one-half hours each week in observing the children in the nursery school. They assist the nursery-school instructors in schoolroom activities, but take no definite responsibility in handling little children. They buy, plan, and prepare meals for the children. They eat with them and see some of the difficulties encountered in



INDOOR ACTIVITIES
Iowa State College, Ames, Iowa

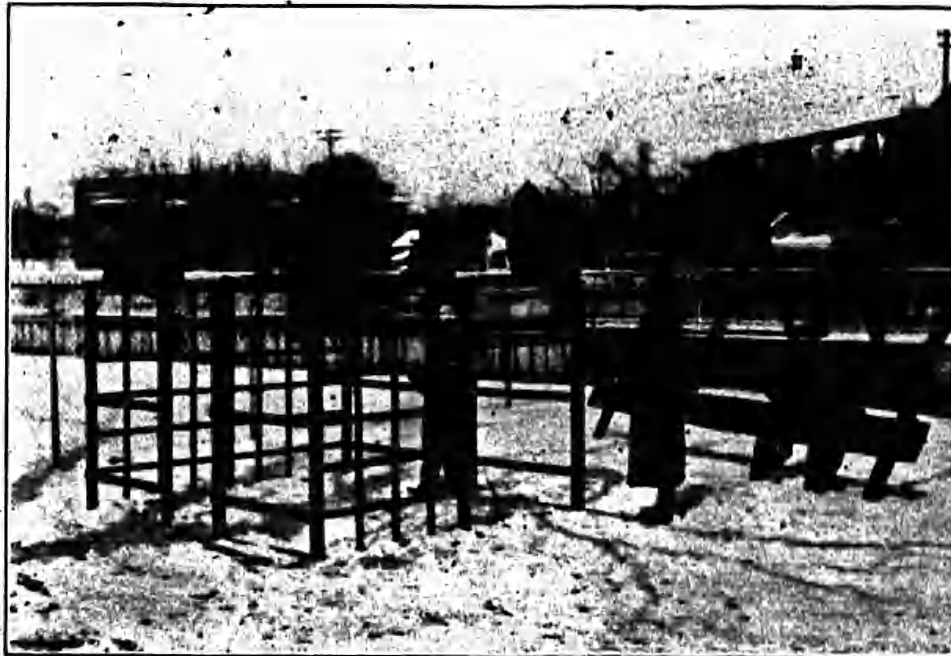
getting the children to eat proper foods. They assist at the nap period, see physical examinations and monthly weighings, and have access to all records of the children with the exception of the psychology reports. They visit the children in their homes, thereby seeing them in a different environment. At the end of the course they make personality studies of at least two children.

In order that all the persons forming the policy of the child-study work may gain a larger vision and may have before them an appreciation and a realization of the need of a well-rounded program, "a child-study seminar was organized. The attendance of the meetings of this seminar was felt by the specialists and graduate students interested in this field to be compulsory, although rules

governing the seminar make attendance voluntary. Each department participating in the child-study work was represented by its head, who conducted one meeting. The following subjects were discussed:

Nutrition for mothers and children—by a nutrition specialist.
The psychology of nutrition—by a psychologist.
Cathartics and laxatives—by a physician.
Body mechanics and health—by a physical educationist.
Survey of nursery schools—by an educationist.

In addition to the residence program, the extension service at Iowa State College has a child specialist in the field. She has



THE FIRST SNOWFALL
University of Minnesota, Minneapolis, Minn.

organized, in near-by towns and rural communities, classes for women who are planning to take two or three years of consecutive work in child study.

*G. Institute of Child Welfare and the Division of Home Economics,
University of Minnesota, Minneapolis, Minn.*

At the University of Minnesota, the Institute of Child Welfare and the division of home economics cooperating offer courses in child care and parenthood education. Eligibility to this work presumes those prerequisites dealing with the physical and health aspects of the child and family.

The course in child development and parental education meets for one hour three times per week for one quarter. Two hours are devoted to lectures or quizzes and one hour to observation in the

nursery school. Reports of these observations and assigned readings are made by students from time to time. This course deals with—

1. Modern interest in child training, its scientific approach; and description of nursery schools.

2. Problems of adjustment; biological and social heredity; aim of physical and mental hygiene.

3. Nature of physical and mental growth.

4. Adjustment of physical factors during infant, childhood, adolescent, and adult stages.

5. Adjustment of behavior factors: Significance of higher level, broad conception of hygiene, and stages and nature of mental development.



STUDYING THE RABBIT
University of Minnesota, Minneapolis, Minn.

6. Inherited pattern reactions: Reflex, instinct, emotion, and conditioning.

7. Acquired pattern reactions: The learning process, fixation of response, motivation, language, and attitudes and sentiments.

8. Thwarting or blocking of urges, adequate or inadequate adjustment.

9. Relation of individual differences to adjustment; nature of individual differences; intelligence; temperament, disposition, and character; and importance of early recognition.

10. Environment of the child: Clothes, toys, and furniture; mother; father; brothers and sisters; other relatives; servants; school and play mates.

11. Specific adjustment problems: Eating; sleeping; habits of eliminating, dressing, and walking; punishment; discipline; and sex.



STORY HOUR
Ohio State University, Columbus, Ohio

12. Positive factors in adjustment: Play and play materials; stories, games, and music; relationship of parents to child; and home atmosphere.

13. Criteria of a good home.

14. Review.



DISHWASHING
Ohio State University, Columbus, Ohio



HOW BABIES STRENGTHEN MUSCLES
Ohio State University, Columbus, Ohio

H. Home Economics Department of Ohio State University, Columbus, Ohio

The home economics department of Ohio State University requires a course in child care and parenthood education of all senior students majoring in home economics, and offers it to all other university students who have fulfilled the prerequisites.

Eligibility to this course presupposes the prescribed academic and scientific courses of other departments included in the home economics curricula, such as physiology, psychology, bacteriology, sociology, economics, and sanitation and hygiene, and the home economics courses in textiles and clothing, foods and nutrition, and household management.

The child care and parenthood course consists of four one-hour lectures and four two-hour laboratory periods per week for 12 weeks. It emphasizes the physical and mental characteristics of the normal child, child management and training, family relationships, and the child's place in the community.

Among the specialists contributing to this course are a pediatrician, a psychologist, one trained in child management, and a number of specialists from the home economics staff.

In February, 1925, a nursery school was established in the department of home economics. The school's enrollment is limited to 12 normal children between the ages of 18 months and 5 years. No child is admitted who has even the slightest symptom of a cold or any other disturbance. Absentees from the nursery school because of illness must be reexamined by the physician in charge before readmittance.

The nursery school is open from Monday to Friday, inclusive, from 8.30 a. m. to 3.30 p. m. The program is very informal and flexible. It includes (1) play with sand, blocks, kiddie cars, balls, and bean bags; (2) work at tables such as stringing large beads, drawing, modeling with clay, and designing with blocks; (3) group singing, rhythm, stories, and play out of doors. The activities are followed by a short rest period before the noon meal, which is served promptly at 12 o'clock. Directly after dinner the children take a nap, followed by a romp out of doors.

Emphasis is placed upon the mental characteristics and the development of good habits, such as obedience, attention, independence, helpfulness, and cooperation, and of health habits as related to food, play, rest, sleep, elimination, washing of hands, brushing of teeth, and drinking of water.

*I. Home Economics Department of Alabama Polytechnic Institute,
Auburn, Ala.*

The home-economics department of the Alabama Polytechnic Institute organized a nursery school for the summer session of 1926. The school was held in the household-management house of the home-economics department. Nineteen children between the ages of 2 and 5 were enrolled.

Before the nursery school opened information was obtained from the mothers of these children concerning the following factors: Name of child; date of birth; sex; age; height; weight; number of boys and girls in family; mother's health before child's birth; weight and length of baby at birth; whether breast fed, how long and other foods given; age when first tooth appeared, when child started to creep, stand alone, walk, and talk; control of bladder and bowels; physical examinations; defects, if any; number of hours spent per day in sleep; food likes and dislikes, and those regularly eaten; mental status; peculiarities; special interests; fears; dislikes; disciplinary problems; and special abilities of relatives.

The purposes of the nursery school were to give (1) the child an opportunity to develop mentally, physically, and socially, and to guide him into the formation of good habits; (2) the parent "child development and training" education; and (3) the student an opportunity to observe the child's physical, mental, and social development; to work with children and to become interested in child life.

The results of the summer's experiment were that—

1. The children learned (1) habits of self-control, cleanliness, and table etiquette; (2) to eat vegetables such as carrots, spinach, tomatoes, green beans, and to drink milk; (3) to relax during rest period; (4) to express themselves through stories, music, clay, sand, and the like; (5) to coordinate muscles, in handling trays, silver, toys, and other articles; and (6) to put away one toy before another was taken.

2. The students learned (1) to prepare and serve food to children from 2½ to 5 years of age, as to proper amount, and children's food habits and idiosyncrasies, and (2) to care for and interest young children.

3. The parents learned how to cope with many of the children's nutritional and behavioristic problems, and the sources of information pertaining to these problems. All the mothers expressed a desire for the continuation of the nursery-school project, and a number planned to carry out the same ideas at home.



WE WANT SUNSHINE
Alabama Polytechnic Institute, Auburn, Ala.

CHAPTER IV

Child Care and Parenthood Education in Higher Educational Institutions Not Maintaining Nursery Schools

This chapter describes the content of child care and parenthood courses as offered in the home economics departments (without nursery school facilities) of three State universities, a State college, and a specialized State teacher-training institution. The University of California is making plans for nursery school facilities. The University of Washington conducts a cooperative child nutrition service. The University of Wisconsin has access to local nursery schools in the city of Madison. The Pennsylvania State College hopes to install a nursery school in the near future, and requires the course prescribed herein of its home economics majors. The Stout Institute, of Menomonie, Wis., requires each home economics girl to observe a child in its own home one hour each week. Every three weeks the entire group of children are brought to the college for play and observation. Toys and other occupational materials are provided.

A. University of California, Berkeley, Calif.

It has several departments offering courses in child welfare. These courses supplement rather than duplicate one another. The departments and courses are: (1) Department of hygiene—child hygiene (one-year course). (2) Department of physiology—physiology of infancy (two units). (3) Department of medicine—pediatrics.

The department of household science offers a three-hour semester course entitled "nutrition of development," which includes the following subjects:

1. Physiology of ovulation, menstruation, cell-division and intrauterine nutrition, with study of metabolism and food needs of the pregnant mother.
2. Physiology of lactation, normal variations in human milk, effect of diet and other factors upon milk production. Breast feeding, advantages and technique. Weaning.
3. Energy metabolism of infants and children; nitrogen metabolism and protein need of infants and children. Fat and carbohydrate digestion, tolerance, and metabolism.
4. Vitamin needs of infants and children, and specific dietetic provision for them.

5. Composition of milk of various species as related to composition of bodies and rate of growth of young, with special attention to iron and other mineral constituents.

6. Detailed comparison of human and cow's milk; reasons for, and methods of modifying the latter for human infants' use; milk-formula writing and preparation of mixtures; composition and value of proprietary foods.

7. The appearance, composition, and bacteriology of normal and abnormal infants' stools. Nutritional disorders of infants, symptoms, cause, prevention, and treatment.

8. Internal secretions and their relation to growth of children. Growth cycles of animals and man.

9. Attributes of the normal child, such as weight, length, body and head circumferences, teeth, hemoglobin content, vital capacity, and basal metabolism.

In addition to the above subjects, students may elect in the household science department one unit of laboratory and field work amounting to three hours per week for 15 weeks.

B. Home Economics Department, University of Washington, Seattle, Wash.

The home economics department of the University of Washington offers a course in child care and parenthood education and a cooperative child nutrition service.

This service is composed of a child nutrition study and a clinic. The clinic is conducted by a member of the home economics staff and a pediatrician who volunteers his services one afternoon each week. The doctor, in the presence of the students and mothers, directs the weighing, measuring, and examining of the children, while the students record the findings and recommendations made.

The child nutrition study includes breast feeding and its related subjects; physical growth of child; muscular development as to sitting, creeping, standing, walking, and muscular coordinations; child training in food and health habits, and obedience; symptoms, prevalence, causes, effects, and means of correcting malnutrition; and opportunities in health work for home economics teachers.

Child care and parental education is divided into four units. Each is taught by the department in which the specific subject matter occurs. The units and departments are—

Units	Departments.
1. Euthenics and heredity.	Zoology.
2. Physical care of the baby.	Nursing.
3. Child psychology.	Psychology.
4. Hygiene of clothing.	Home economics.

1. *Euthenics and heredity* includes (1) eugenics—origin, scope, and aim; (2) biological foundations—the germ cells and developmental processes; (3) the laws of hereditary transmission—Mendelian

theory; (4) nature vs. nurture—the transmission of acquired characters; (5) heredity of disease—deformities, physical defects, mental deficiencies; (6) the eugenic program—the control of human evolution.

2. *Physical care of the baby* considers (1) prenatal care of mother—health of mother, its effect on child during nursing period and following; (2) bath (demonstration of bathing tiny baby in hospital); (3) breast feeding, weaning; (4) normal development in teething, standing, walking, talking, and physical habits; (5) correction of defects—eyes, teeth, tonsils, adenoids, and orthopedics; (6) ordinary diseases of children—symptoms, control, and results; infectious diseases, colic, and eczema; (7) trip to orthopedic hospital.

3. *Child psychology* emphasizes (1) the neurological explanation of infants' behavior; (2) the correspondence of physical and mental growth in childhood to ultimate ability in later years; (3) the nature of instinct; (4) the formation of habits; (5) the factors of endowment and training as indicated by a study of fraternal and identical twins; (6) learning to talk; (7) differences in physical and mental development, as to individuality, age, and sex; (8) training for obedience, routine habits, and social responsibility; (9) the correction of faults; (10) the diagnosis of child by the methods of clinical psychology.

4. *Hygiene of clothing stresses* (1) properties of textile fibers, as to absorption, conductivity, porosity, lightness, looseness, and qualities of being easily cleaned; choice of garments for underwear, hosiery, and maternity clothing; (2) cost of clothing—layettes (ready-made versus homemade); garments for children from 1 to 5 years of age, such as play and night clothes, best clothes, and wraps; (3) upkeep, as to laundering fast colors, sterilization, care and repair of clothing and shoes, and remodeling garments. Students are required to make an inventory of actual clothing of an infant or small child, to compare the cost of ready-mades and homemades, and to make suggestions for better choice. They are also required to gather data concerning the laundering of children's garments, as to place, manner, and frequency.

*C. Home Economics Department, University of Wisconsin,
Madison, Wis.*

The home-economics department of the University of Wisconsin offers to junior students who elect dietetics opportunities in feeding experiments with selected children in their own homes and in child-welfare clinics. It offers to graduate students a study in prenatal

diets in the Wisconsin General Hospital and the medical school of the university, and to senior students a course on the family. The principal topics of this course are—

1. *Physical basis of human life and development*, as to theories advanced regarding (1) the way life begins and a study of cell division and development of the infant before birth, and (2) theories of human inheritance relating to the physical basis of theories in lower life forms, modern development of Mendelian law in plants and lower animals, difficulty of application to man, and source of data now used in human studies.

2. *The modern family, its social and economic status*, concerned with (1) problems of city and State with reference to infant mortality influenced by industrial work of women; (2) a study of laws of America, Europe, and other countries as affecting women in industry; (3) the inheritance of acquired characteristics, and the effects on the germ plasm of social diseases, alcoholism, drug habit, and mental diseases in parents; (4) a study of social evils and problems of education with regard to idiots, insane, deficient, and paupers in relation to the home; (5) institutional life, its effects on death rates, physical and mental development, its cost to the country, and remedies; (6) child in industry (effect of war) versus mother's pensions, regarding effect upon State laws and necessary legislation; civic efforts toward education of the foreign and the poor and ignorant in the large American cities; French system with reference to infant mortality; pension system for mothers in America and European countries; the necessity for survey of cities to protect the home; and (7) reduction of birth rate and effect on population (normal and war conditions) concerning educational duty in preservation of race most fit; a study of death statistics as showing diseases and effect of race on same; and the duty and privileges of educated, healthy class.

3. *Education of the child as a problem of home and school*, including (1) a study of the growth of the nervous system, and the racial effects before birth, during infancy, and childhood; (2) physical development as to review of theories of education as applied to types of children; rate of growth in boys and girls; the preschool child in home, nursery schools, and kindergartens; (3) environment as to rural versus urban life; type of home; and effect on mental and moral development; (4) early habit formation at home; and (5) emotional development, as to basis for present theories, and education during adolescence.

4. *Abnormal conditions and their avoidance*, through training at home and studying the hygiene of the nervous system, applying modern theories and training in will power.

D. Home Economics Department, Pennsylvania State College, State College, Pa.

The home economics department of the Pennsylvania State College offers a year's course in child care and parenthood education, which is divided into two units. The first unit covers informational subject matter and the second unit emphasizes the adaptation of this material and its methods of presentation to high-school girls.

The first unit includes—

1. *History of education of young children*, as advocated by (A) the nursery school movement of (1) England—examples: Robert Owen's School, infants' schools act of 1919 and nursery schools to-day; (2) the Ecoles Maternelles in France; (3) Doctor Montessori in Italy; (4) Froebel and the kindergarten in Germany; (5) pre-school education in the United States (kindergartens, day nurseries, nursery schools—for information concerning the latter references are made to New York City Bureau of Education experiments; Boston, Ruggles Street; Merrill-Palmer, Detroit, Mich.; colleges promoting nursery schools; nursery schools in secondary education—Highland Park High School, Highland Park, Mich.); (B) theories of nursery school education—advantages to (1) the child, physical, mental, and social; (2) the student as opportunities to observe and study the characteristic behavior, physical condition, motor ability, mental sense development, and powers of observation of young children; and to record the case history, physical, mental, and medical examinations, regular weight and height, food at home and school, attendance, and bowel reports; and (C) the régime in the nursery school as to daily schedule of activities, problems presented by each activity, and the student's duty in connection with each activity.

2. *Child welfare movement*, as to (1) changing attitudes toward child life concerning (a) early practice of infanticide; (b) idle children, a burden to the State; and (c) present-day tendency and policy evidenced in our many child-saving institutions; (2) what infant morbidity and mortality rates tell concerning (a) change in attitude and treatment of disease as a prime cause for lower mortality rates; (b) rural and urban mortality rates; (c) negro and white mortality rates; (d) foreign and white mortality rates; and (e) the community's responsibility in relation to the department of health, visiting nurses, clinics, educational and hygienic campaigns, strict quarantine, and housing regulations; and (3) the employment of children (a) causes—parents' greed, maladjustment in school, and economic conditions; (b) effects—mental and physical stunting; social, economic, and moral results; (c) remedies—education of parents and the community; legislation; and enforcement of laws affecting child labor and school attendance.

3. *Child mentality and management*, regarding (A) development during the infant (birth to 1 year of age) and preschool (1 to 6 years of age) periods, in connection with child's (1) motor development, through play, of eyes, mouth, head, trunk, hands, feet, and legs; (2) sensory and mental development of vision, hearing, and touch; as to recognition and comparison of objects; ability to judge size, shape, weight, sound, color, and time; acquisition of language; reasoning; ideas of truth; and memory; and (3) emotional development as to fear, rage, jealousy, contrariness, suggestibility, embarrassment, and love; and (B) training the infant and preschool child in problems of (1) feeding; sleeping; control of bowels and bladder; and nervous habits such as thumb sucking, nail biting, and speech defects; (2) disobedience, contrariness, temper tantrums, domineeringness, undue compliance, jealousy, indifference, suggestibility, honesty, day dreaming, imagination, emotional dependence, self-confidence, and self-trust; (3) morality, religion, and sex education; and (4) suitable literature and toys for children.

4. *Children presenting special problems to the State*: (1) Handicapped children (blind, deaf, crippled, tubercular, malnourished, and mentally defective); (2) dependent children (orphans and illegitimate)—causes of; and (3) juvenile delinquents—nature and causes of; handling of problems by juvenile court.

5. *Child-saving agencies*.—Students report to the class the functions of the following agencies: Playground movement, day nurseries, girl and boy scouts, milk stations, settlement work, visiting nurses' associations, visiting housekeepers, children's libraries, the Children's Bureau of the United States Department of Labor, clinics, Children's Aid Society, State department of child welfare, city charities, fresh-air camps, child museums, American Child Health Association, Junior Red Cross, mothers' pensions, better homes in America, and county welfare work.

The second unit includes a study of—

1. *Factors contributing to the physical well-being of the child*, such as (1) good heredity, excluding the unfit for marriage; emphasizing temperance and purity; development of eugenics; and protection of working mothers; (2) proper care during infancy, a study of causes of mortality rates among children; prevention of infant and child mortality through education for motherhood; prenatal care of mother and child; child-welfare work; and (3) proper care during preschool period as to general care; and the need, types, and effects of health habits in eating, sleeping, dressing, recreating, and playing; regularity; and tranquillity.

2. *Mental development*, as to whether child is normal, backward, or superior, regarding his habits, training, speech, story telling, reading, and influence of books, pictures, and movies.

3. *Moral and spiritual development* concerning ideals, standards, strength, and independence.

4. *Social relationships* with individuals, at home and school, in the neighborhood, community, nation, and world.

5. *Economic status* as to education for living and for making a livelihood.

6. *Child management* pertaining to obedience, self-control, cooperation, self-reliance, initiative, leadership, ownership, imitation, anger, and fear.

7. *Factors observed in child-care course* for secondary schools as to (1) type of, and child-care agencies in the community; (2) attitudes of parents and school authorities; (3) school subjects contributing to child care such as foods and nutrition, family health, hygiene, home nursing, and biology; (4) facilities available; (5) pupils' and teachers' schedules; and (6) personality of teacher.

8. *Method of approach* as to types and presentation of lessons, and cooperation with other agencies.

E. Home Economics Department, Stout Institute, Menomonie, Wis.

The home economics department of Stout Institute requires its home economics majors to take "Child psychology," "The physiology and hygiene of the school child," "Physical care of the child," "Problems in child feeding," and "Child study." The latter two courses are outlined below.

1. *Problems in child feeding* are studied in conferences, clinics, laboratory classes, and home visits, to give student-teachers nutritional information which can be applied to malnourished children.

(1) Conferences (1 hour per week for 18 weeks for student-teachers) include (a) readings, (b) reports, and (c) discussions of the common causes and symptoms of malnutrition and of the recording, charting, and plotting of health curves.

(2) Laboratory classes (2 hours and 15 minutes per week for 16 weeks) include weighing and feeding of children, serving, and clearing tables by them, making illustrative materials, such as posters and scrapbooks and the teaching of (a) health rules through stimulating the children's sporting instincts and interest in their personal appearance; (b) selection of foods needed for energy, body building, keeping well, good digestion, with special lessons on milk, cereals, fruits, vegetables, eggs, and meat; and (c) the essentials of an adequate meal through the observation of white rats on deficient and adequate diets.

(3) Clinics cover a thorough physical examination of the school child in the presence of the school nurse, instructor, and student-teachers.

(4) Home visits stimulate the interest of parents and enlist their cooperation. They afford opportunities to direct the general health habits of the child and to compare the results of the child's health progress.

2. *Child study* covers—

(1) The early physical, mental, and spiritual development of the child.

(2) Child welfare contributions made in the United States through legislation, juvenile courts, and organizations such as the Children's Bureau of the United States Department of Labor, playground movement, Child Health Association, Federation for Child Study, Child Welfare Association, Russell Sage Foundation, Better Babies Bureau, eugenics record office at Cold Spring Harbor, Long Island, N. Y.

(3) The child in the home where (a) the mother is a wage earner of necessity; (b) the mother in addition to her household management prefers remunerative work within or outside of the home because of inherent ability or professional training, or prefers some other form of occupation to the usual household activities, or (c) home making is the main profession.

(4) Environment and its effects upon the health, mental attitudes, and emotional states of the infant, preschool and primary school child.

(5) Problems in habit formation regarding development of (a) moral sense, (b) imagination through story telling and dramatization, (c) aesthetic appreciation through art, music, and literature, and recognition of special abilities, capacities, and provision for their development.

(6) Nursery equipment, playthings, and toys.

(7) Importance of parental and preparental education.

(8) Special problems, such as (a) planning and supervising entertainment, games, stories, and refreshments; (b) reporting on articles from current periodicals of special interest to students of child study; (c) arranging special topics on bulletin-board; (d) planning and purchasing toys and occupational material for children of preschool age and observing what is most used by children of different ages; (e) making educational posters of value to parents or children; (f) preparing a classified bibliography for parents or teachers; (g) arranging group games for small children; (h) using music in children's work, play, or rest; (i) equipping a child's playroom or a community nursery; (j) telling stories each week throughout semester; (k) arranging list of suitable books for children of varied ages,

and reading to a child of a given age each week; (*l*) writing and producing a simple play for children; (*m*) cooperating with parents in regard to behavior problems; (*n*) preparing clothing budgets for children of varied ages; (*o*) studying community work for children, such as playgrounds, welfare centers, and clinics; and (*p*) studying units or courses in child care for girls of high-school age.

CHAPTER V

Child Care and Parenthood Education Combined with Other Duties in the Home-Management Houses

This chapter briefly presents the organization of a "family" in the household-management houses of the division of home economics of the University of Minnesota. The chapter describes the duties of the child director, manager, associate manager, special and general assistants.

The home-economics seniors of the University of Minnesota apply their home-making knowledge gained in the classrooms, laboratories, and through home experiences to "everyday living" in the two home-management houses maintained by the division of home economics of the university.

The family of the home-management houses consists of one or two children of prekindergarten age, nine or more home-economics seniors (for one semester, after which another group replaces them), and the resident instructor.

The family is organized into a child director, manager, associate manager, special and general assistants.

The emphasis of the students' work in the home-management houses is on child care and training, management, and social and family relationships, with reference to cooperation and tolerance, professional attitude, reliability, judgment, foresight, social ability, and leadership.

Home responsibilities are carried by each student, who in turn becomes child director, manager, associate manager, special and general assistant.

Each week the manager calls the group together to discuss with them home-making topics of common interest and concern. Individual conferences are scheduled with the resident instructor.

1. *The child director* (1) supervises children's health, care, personal appearance, formation of speech, religious training, new accomplishments according to age and development, and desirable habits as to personal cleanliness, dressing and undressing, eating, sleeping, toilet, play, and care of toys and clothing; (2) prepares children's schedule for general assistants who care for children three days per week and Sundays from 8 a. m. to 4.30 p. m.; (3) keeps children's diary; (4) records their height, weight, gain, de-

velopment, and any illness or abnormal conditions; (5) observes development of health and sanitary habits, physical and manual skills, social behavior, courtesies, language, and abilities; (6) selects clothes according to size, wearing qualities, and cost; (7) confers with resident instructor as to children's menus and schedule, daily problems, and accomplishments; (8) develops schedule suited to children's needs; (9) calculates food amounts needed; (10) prepares menus and special foods; (11) bathes the children; and (12) looks after their toilet articles, toys, towels, and bedroom.

2. *The manager* assumes the responsibility of (1) hostess, in extending hospitality to guests, presiding over meals, answering



BOB WAS REARED IN THE HOME-MANAGEMENT HOUSE
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the door, telephone calls, and observing special events, holidays, and social life; and for (2) food standards for the health and satisfaction of the family, menu making, marketing, storage and care of perishables, utilization of left overs, care of refrigerator, storeroom, and fireless cooker; (3) food preparation (including child-director's lunch), care of cooked foods, dishwashing, and disposal of garbage; (4) economical use of supplies and equipment including food; gas; electricity; fuel; care of range, fireless cooker, storeroom, and cupboards; (5) standards for thrift, use of time, and methods of work; (6) locking of door and turning off lights; (7) home records in-

cluding daily journal; summary; check, pass, receipt, menu, and inventory books; guests; breakage; (8) promotion of optimism, health supervision of sick members of the household; and (9) conferences with resident instructor as to menus, order list, food proportions, house records, child director, associate manager, and assistants.

Before the incoming manager assumes her managerial duties she informs herself on the following: (1) *Duties* to be assigned to group members; (2) *marketing* list for the entire period for fresh fruits, vegetables, and canned goods, other groceries, dried fruits, meats, fish, lard, household and cleaning supplies; (3) *purchasing list* for



BOB LIKES TO HELP WITH THE BAKING
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household equipment and children's supplies and equipment; (4) *selection of business places* for standards, quality, price, and brands of goods; sales advertisements; and data on cuts of meat and other food materials; (5) *food proportions* needed for meals; (6) *menu building* as to adequacy, combination; variety, cost in money and time, oven space, amount of fuel, and dishes required for preparation.

3. *The associate manager* assumes the responsibility for (1) the care of house furnishings and equipment and suitable standards for cleanliness and appearance maintained by (a) daily, weekly, and special care schedules; (b) application of cleaning principles; and (c) availability of cleansing reagents and cleaning equipment; (2)

distribution of linens for kitchen, dining, and bathrooms; (3) supervision of heat and temperature, fuel supply, fire in fireplace, air in radiator, regulation of thermostat, and ventilation of house; (4) lighting of house as to renewal of fuses, use of lights, and reserve



WHO SAYS A BABY DOES NOT LIKE SPINACH?
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supply of light bulbs; (5) plumbing, as to main and local shut-offs; outlet to bathtubs and lavatories; (6) use of linens and reagents by general and special assistants; and (7) general duties, including (a) closing of doors and windows and adjustment of shades; (b) personal standards for bed and bathroom; (c) care of newspapers and flowers; (d) arrangement of linen closet and storage of table

linen; (e) assisting manager with hostess duties; (f) conferring with resident instructor, and with outgoing associate manager regarding arrangement and use of equipment and supplies.

4. *The special assistant* is responsible for (1) washing child's clothes and house linens; (2) the organization of household laundry work regarding (a) method of sorting, soaking, washing, bluing, starching, hanging, sprinkling, folding, airing, and storing, and (b) use and care of laundry equipment, reagents; and confers with the resident instructor and outgoing special assistant.

5. *The general assistant* or meal manager (1) reports to manager the food supplies needed or those found below standard in quality; (2) lists equipment to be purchased or repaired; (3) checks standards of seasoning, temperature, and food service in the dining room; (4) apportions food to be prepared by her assistant and herself; (5) supervises tables in dining room as to correct number of places, napkins for guests, silver and china needed, sufficient light and ventilation; (6) prepares children's trays; (7) puts dining room in order; (8) stores left-over foods; (9) leaves all equipment and supplies used clean and in proper places, as china, silver, tea kettle, food containers, range, including broiler, waste-paper basket, garbage pail, sink, and fireless cooker; (10) washes out dishcloths; (11) sweeps stairs; and (12) prevents waste of food, electricity, gas, water, and cleaning supplies.

For further information concerning the educational value of the home management house for potential home makers, refer to *School Life*, Vol. XI, No. 1, September, 1925, which can be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 5 cents; and to the following institutions of higher education which have children in home-management houses:
State universities: Maine, Oklahoma, Missouri, and Nebraska.

State agricultural colleges: Iowa, South Dakota, Montana, Pennsylvania, and Oklahoma.

Normal schools: Buffalo Normal School (New York) and Normal School of Terre Haute, Ind.

Private institutions: Cornell University (Ithaca, N. Y.) and Drexel Institute, Philadelphia, Pa.

APPENDIX

Summary of the Conferences on Child Training and on Children in Home-Management Houses, Held at the University of Minnesota, Minneapolis, Minn.

The Institute of Child Welfare and the division of home economics of the University of Minnesota held at that institution on June 25 and 26 of 1926 joint conferences regarding child-training courses and children in home-management houses.

A summary of the findings of child-training courses in 22 institutions of higher education made by Dr. John E. Anderson, director of the Institute of Child Welfare of the University of Minnesota, is given, also summaries of the conclusions reached by the conferences on child-training courses and children in home-management houses.

I. A summary of the findings of child-training courses in 22 institutions is listed as follows:

1. The most common titles of such courses are "Child care and training" and "Child care."

2. Almost all the courses are located in the senior year of college work. The usual credit for such courses is two or three semester hours or three quarter hours. In only one-third of the institutions do students receive credit for actual observation or study of children.

3. In all but 5 institutions there are opportunities for the observation of children. In 10 there is nursery school observation.

4. Prerequisites for the courses vary widely, the most common in two-thirds of the institutions being a course in psychology and the next most common being a course in foods, nutrition, or dietetics.

5. A survey of the topics treated in such courses shows considerable variation in content. In one-fifth of the courses emphasis is on physical care, in one-fourth on both physical and mental care, and in one-half predominantly on mental care and adjustment.

6. A study of the text and reference material used in such courses reveals wide divergences of opinion and shows the necessity for some degree of standardization of such courses.

II. A summary of conferences on child-training courses is given below:

A survey of opinions as to topics which should be included in child care and training courses is presented.

It was decided to use the following division of subject matter as a basis for discussion and to enumerate the sources in an institution from which assistance might be secured in presenting subject matter.

1. The subject of physical growth and development was subdivided as follows:

(1) Maternity and infant care.

Sources from which assistance might be secured in presenting this subject matter are: Public health departments, pediatricians, nurses, and geneticists.

(2) Physical growth of the preschool child.

Sources from which assistance might be secured in presenting this subject matter are the studies of nutrition, physical education, clothing, psychology, medicine, and family relationships.

2. Mental growth and character development.

Sources from which assistance might be secured in presenting this subject matter are the studies of psychology, medicine (including psychiatry), philosophy (including ethics), sociology, and habit clinics.

3. Educational methods for young children.

Sources from which assistance might be secured in presenting this subject matter are the studies of educational psychology, history of education, and preschool methods.

During the discussion, the following points were developed: That since the subject matter for such a course is growing rapidly at this time, methodology should not be crystallized at this time, but that an investigational procedure is necessary. It was agreed that a large body of material is already available which justifies the giving of such a course.

4. Environmental aspects.

Sources from which assistance might be secured in presenting this subject matter are the studies of sociology, psychology, phonetics, home management, aesthetics, and ethics.

During the discussion a seminar at Iowa State College for all contributing to child care and training work was mentioned.

The final topic discussed was the opportunity for observation or practice with preschool children. It was suggested that the nursery school may afford opportunities for (1) personality studies, (2) outlines for study of general reactions, (3) case studies, and that supplementary studies should be made of children in their homes in relation to parents. Further supplementary studies should be made with children in various institutions, such as orphanages, juvenile

courts, infant-welfare societies, home-management houses, kindergartens, habit clinics, and day nurseries.

It was the sentiment of the group that at least one organized group should be available for observation wherever a child-training course is given, i. e., a nursery school or its equivalent. In addition, there should be opportunity for home observation.

The problem of the organization of a nursery school according to age groups was discussed with two alternatives presented: (a) Horizontal age divisions, i. e., all in group of approximate age; (b) mixed group of various ages. Each plan presents certain advantages and disadvantages, but probably where only one nursery school group is possible, the mixed group is desirable. More than one group offers the advantage of shifting children according to their individual needs.

The conference adopted the following recommendations:

1. The minimum in child care and training should be a course carrying three semester credits, offering some opportunity for laboratory observation and open to junior and senior students.

2. This course should be supplemented when possible by a course in methods and material for the preschool period.

3. The courses now offered in colleges should be correlated with courses offered in related colleges or departments, and, if necessary, new courses be organized to cover the aspects of child care and training previously stated—(a) physical growth and development, (b) mental growth and character development, (c) education, (d) environmental factors.

4. Courses in child care and training should not be undertaken unless it is possible to maintain high standards of work, staff, and equipment, in all child-training projects in order that paramount interests may be safeguarded.¹

III. The summary of conferences on children in home-management houses emphasizes the following aims:

The aims of a course in home management conducted in home-management houses having children are (1) to develop in students' ability to manage certain domestic problems in any home, to make intelligent decisions concerning problems of family life, to insure confidence and appreciation of relative home values, to make adjustments within the family group and the community, and to see the home as a whole in its various relationships to society; (2) to leave the administrative mechanism of the home-management house to each institution; (3) to make the methods of procedure in home-manage-

¹ In Bureau of Education bulletin, 1926, No. 4, entitled "Progress in Home Economics Education," appears a time-allotment study for child care and welfare as found in the schools of 62 cities. This study begins with the sixth grade of the elementary school and extends through the twelfth grade of the high school.

ment houses flexible, based on self-initiation, execution, and independence with the maximum responsibility for development of abilities to solve the current problems of any home; (4) to give potential home makers experience in the care and training of a young child or children through first-hand contacts over a 24-hour period for a number of weeks; (5) to offer children training from the behavior standpoint and the maximum physical care; (6) to have for beneficial influences on each other more than one child in the house; and (7) to open the house during certain hours of the day for day nursery purposes, and to invite fathers, brothers, and young men friends, so that through their contacts with children they may develop appreciation and understanding of child life.

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